

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-20 (Canceled)

21. (Currently Amended) A method for maintaining communication over first and second disjoint networks between at least first and second computing devices, the second computing device comprising a mobile computing device, the method comprising:

using a first network identifier to identify the first computing device,
communicating over a first network between the first computing device and said second, mobile computing device;

authenticating the second, mobile computing device for authorization to
communicate with the first computing device over the second network before sending a
further network identifier to the second, mobile computing device over the first network;

sending, to the second, mobile computing device over the first network, at least one further network identifier for use in at least in part identifying the first computing device on at least a second network disjoint from the first network, said at least one further network identifier being at least in part different from said first network identifier;
and

using the at least one further network identifier to identify the first computing device, communicating between the first and second computing devices over the second network, thereby allowing communications between the first and second computing devices to continue even though said network identifier changes.

22. (Cancelled)

23. (previously presented) The method of claim 21 wherein said sending comprises sending distributed interface data to the second, mobile computing device over the first network.

24. (previously presented) The method of claim 21 further including physically attaching a network interface adapter associated with said second, mobile computing device to at least one of said first network and said second network.

25. (previously presented) The method of claim 21 wherein said first network provides a network point of attachment, and said communicating over the first network comprises establishing wireless communications between said second, mobile computing device and the network point of attachment.

26. (Currently Amended) A process for providing communications between mobile computing systems and a network computing system as the mobile computing systems roam between plural disjoint network segments, comprising:

establishing communications between the mobile computing systems and the network computing system via a first network segment;

sending to the mobile computing systems, via the first network segment, network identifier information for use in communicating with said network computing system via plural further network segments, at least some of said plural further network segments being disjoint from the first network segment;

authenticating at least some of the mobile computing systems for authorization to communicate with the network computing system over at least one of said plural further

network segments before sending the further network identifier information to said mobile computing systems;

using said network identifier information to communicate between the mobile computing systems and the network computing system via any of said plural further network segments; and

conditioning access to communications over at least some of said plural further network segments with said network computing system and protecting at least some of said plural further network segments from unauthorized communications based at least in part on said network identifier information.

27. (previously presented) The process of claim 26 wherein said network identifier information comprises distributed interface data.

28-29 (Canceled)

30. (Cancelled)

31. (previously presented) The process of claim 26 wherein said mobile computing systems each comprise a network interface adapter physically attachable to at least one of said plural further network segments.

32. (previously presented) The process of claim 26 wherein at least a first of said mobile computing systems shares at least one interface address with each of said plural further network segments so that if the first mobile computing system roams into any one of the plural further network segments and detects that it has roamed onto a different network segment, the first mobile computing system selects an applicable network address to communicate with the network computing system via said different network segment into which said first mobile computing system has roamed.

33. (previously presented) The process of claim 32 wherein mobile computing system selects said applicable network address based on a metric.

34. (previously presented) The process of claim 33 wherein said metric comprises speed.

35. (previously presented) The process of claim 33 wherein said metric comprises cost.

36. (previously presented) The process of claim 33 wherein said metric comprises availability.

37 (previously presented). The process of claim 33 wherein said metric comprises number of hops.

38. (Currently Amended) A system for facilitating communication over disjoint networks between first and second network devices at least one of which is mobile, the system comprising:

- a first network;

- a first network device coupled to the first network;

- a second network device also coupled to the first network, said second network device using at least a first network identifier identifying the first network device on the first network to communicate with the first network device over the first network;

- a data transmitter coupled to the first network, said data transmitter sending, to the second network device over the first network, a further network identifier at least in part identifying the first network device on at least a second network disjoint from the first network, said further network identifier being at least in part different from said first network identifier;

an authenticator that authenticates the second network device for authorization to communicate with the first network device over the second network before sending the further network identifier to the second device:

said second network device using the further network identifier at least in part identifying the first network device to communicate with the first network device over the second, disjoint network, thereby allowing communications between the first and second network devices to be maintained and to continue even though a network identifier said second network device uses to reach said first network device has changed.

39. (Cancelled)

40. (previously presented) The system of claim 38 wherein the further network identifier comprises distributed interface data.

41. (previously presented) The system as in claim 38 wherein said second device comprises a network interface adapter that is physically attached to said first network.

42. (previously presented) The system as in claim 38 wherein the data transmitter comprises a network point of attachment, and said second device communicates wirelessly with the network point of attachment.

43. (Currently Amended) A system for maintaining communications between mobile computing systems and a network device as the mobile computing systems roam between plural disjoint network segments, comprising:

a first network segment that establishes communications between mobile computing systems and the network device;

a data transmitter that sends the mobile computing systems, via the first network segment, identifying information for use in reaching said network device via plural further network segments at least some of which are disjoint from the first network segment;

an authenticator that authenticates at least one of the mobile systems for authorization to communicate with the network device over at least one of said plural further network segments before sending the identifying information to the at least one mobile system;

said mobile computing systems using said identifying information to communicate with the network device via at least a disjoint one of said plural further network segments; and

a policy manager that conditions access to communications with said network device over said at least some of said plural further network segments and protects at least some of said plural further network segments from unauthorized communications based at least in part on said identifying information.

44. (previously presented) The system of claim 43 wherein said identifying information comprises distributed interface data.

45. (Cancelled)

46. (previously presented) The process of claim 43 wherein at least one of said mobile systems comprises a network interface adapter physically attached to at least one of said plural further network segments.

47. (previously presented) The process of claim 43 wherein at least one of said mobile systems shares an interface address with each of said plural further network

segments so that if the at least one mobile system roams into any one of the plural further network segments and detects that it has roamed, the at least one mobile end system selects an appropriate network address to communicate with the network device via said plural further network segment into which said at least one mobile system has roamed.

48. (previously presented) The process of claim 47 wherein at least one mobile system selects said network address based on a metric.

49. (previously presented) The process of claim 48 wherein said metric comprises speed.

50. (previously presented) The process of claim 48 wherein said metric comprises cost.

51. (previously presented) The process of claim 48 wherein said metric comprises availability.

52. (previously presented) The process of claim 48 wherein said metric comprises number of hops.

53 (previously presented). The method of claim 21 wherein said first and further network identifiers comprise network addresses, and wherein using the at least one further network identifier comprises using said further network address instead of said first network address to reach said first computing device via the second network, wherein said first and second disjoint networks do not share network address information therebetween.

54 (previously presented). The process of claim 26 further including maintaining continued communications between said mobile computing systems and said network

computing system even though said mobile computing systems use different network addresses to reach said network computing system via said plural further network segments, wherein said first network segment and said plural further network segments do not share network address information therebetween.

55 (previously presented). The system of claim 38 wherein said first and second identifiers comprise addresses, and said second network device uses the further network address instead of the first network address to reach said first network device over the second network, wherein said first and second networks are disjoint and do not share network address information therebetween.

56 (Currently Amended). The system of claim ~~42~~⁴³ wherein said mobile computing systems maintain continued communications with said network device via said plural, further network segments even though said mobile computing systems use different network addresses to reach said network device via said plural further network segments, wherein said first and plural further network segments do not share network address information therebetween.